PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD-2 (GOV. RITCHIE HWY) AND DOVER ROAD IN ANNE ARUNDEL COUNTY.

MD-2 (GOV. RITCHIE HWY) IS ASSUMED TO RUN IN A NORTH SOUTH DIRECTION.

INTERSECTION OPERATION

A SYSTEM READY BASE MOUNTED CABINET AND MASTER CONTROLLER WITH ALL NECESSARY EQUIPMENT WILL BE INSTALLED AT THE INTERSECTION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 5 NEMA PHASES. MAINLINE MD-2 OPERATES CONCURRENTLY WITH EXCLUSIVE/PERMISSIVE LEFT TURNS. DOVER ROAD OPERATES ALONE. THIS INTERSECTION IS THE MASTER LOCATION FOR THE MD-2 INTERCONNECT SIGNAL SYSTEM.

A TELEPHONE SERVICE DROP SHALL BE PROVIDED.
VIDEO CAMERAS SHALL PROVIDE PRESENCE DETECTION. STREET LIGHTING AND STREET NAME SIGNS SHALL BE UPDDATED TO CURRENT STANDARDS.

PROJECT CONTACTS:

1. THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

   KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
   PHONE: (410) 841-1003

   JAMES FOLDEN, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
   PHONE: (410) 841-1031

   JOHN MAYS, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
   PHONE: (410) 841-1013

   MIKE HUBER, UTILITY ENGINEER
   PHONE: (410) 787-7652

   MR. RICHARD DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
   PHONE: (410) 787-7630

   MR. EDWARD RODENHIZER, CHIEF SIGNAL OPERATIONS SECT.
   PHONE: (410) 787-7652

   MR. SONNY BAILEY, CHIEF SIGN SHOP
   PHONE: (410) 787-7676

   THE POWER COMPANY REPRESENTATIVE:
   BALTIMORE GAS AND ELECTRIC
   7317 PARKWAY DRIVE SOUTH
   HANOVER, MARYLAND 21076
   (410) 850-4620

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104.00 OF THE STANDARDS FOR HIGHWAYS & INCIDENTAL STRUCTURES.

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	QUANTITY
900000	MASTER/LOCAL CONTROLLER AND CABINET SIZE 6 W/ ALL NECESSARY EQUIPMENT HOUSED BASE MOUNTED CABINET	1 EA
973023	FLAT SHEET ALUMINUM SIGNS CONSIDTING OF:	73 SF
	1 EA R3-5(L) "LEFT ONLY" (30"X36") MAST ARM MOUNT	
	1 EA R5-1 "DO NOT ENTER" (30"X30") GROUND MOUNT	
	D-3(2) (16" X VAR.) MAST ARM MOUNT (SINGLE FACED)	
	1 EA "Gov. Ritchie Hwy"	
	D-3(2) (16" X VAR.) MAST ARM MOUNT (DUAL FACED)	
	1 EA "Dover Road ARROW/ARROW Dover Road"	
	1 EA "ARROW Dover Road/Dover Road ARROW"	
	GUIDE SHIELD ASSEMBLY (24X51) POLE MOUNT)	
	1 EA "NORTH, MD 2, RIGHT ARROW"	
	GUIDE SHIELD ASSEMBLY (36X75) POLE MOUNT)	
	1 EA "SOUTH, MD 2, LEFT ARROW"	

EQUIPMENT LIST 'B'

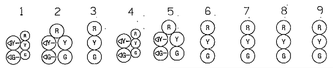
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	QUANTITY
100000	MAINTENANCE OF TRAFFIC	1 EA
203030	TEST PIT EXCAVATION	3 CY
500000	REMOVE PAVEMENT MARKING LINES	50 LF
585625	24" WHITE HEAT APPL. PERMANENT THERMO. PAVEMENT MARKING	60 LF
585627	WHITE HEAT APPL. PERMANENT PREFORMED THERMO. PAVEMENT MARKING	52 SF
800000	8" LED SIGNAL HEAD SECTION	6 EA
800000	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT LUMINAIRE & LAMP	2 EA
800000	MAST ARM POLE & 38 FT MAST ARM ANY "T" DIMENSION	1 EA
800000	MAST ARM POLE & 60 FT MAST ARM ANY "T" DIMENSION	1 EA
800000	MAST ARM POLE & 70 FT MAST ARM ANY "T" DIMENSION	1 EA
800000	MICRO -LOOP PROBE SET ANY LENGTH LEAD IN	2 EA
800000	NON-INVASIVE MICRO-LOOP TRIPLE PROBE SET ANY LENGTH LEAD IN	2 EA
800000	REMOVE & DISPOSE OF EXISTING EQUIPMENT	1 EA
800000	VIDEO CAMERA & CABLE ANY LENGTH TO CONTROLLER	3 EA
800000	1 INCH DETECTOR SLEEVE GALVANIZED OR FLEXIBLE	15 LF
800000	12-PAIR COMM. CABLE, JELLY FILLED (UNDERGROUND)	430 LF
800000	SCHEDULE 80 PVC CONDUIT UP TO 4" - BORED	750 LF
800000	SCHEDULE 80 PVC CONDUIT UP TO 4" - SLOTTED	60 LF
800000	SCHEDULE 80 PVC CONDUIT UP TO 4" - TRENCHED	80 LF
800000	WOOD SIGN POST UP TO 4X6	16 LF
800000	6- PAIR COMMUNICATION CABLE SOLID (NO. 19 AWG)	50 LF
800000	INSTALL OVERHEAD OR GROUND MOUNTED SIGN	73 SF
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	330 LF
807202	METERED SERVICE PEDESTAL	1 EA
810022	CABLE 1-CONDUCTOR, NO. 8 AWG-THHN/THWN	40 LF
811001	INSTALL ELECTRICAL HAND-HOLE	9 EA
860284	12" LED SIGNAL SECTION	29 EA
860292	CUT/CLEAN/GALVN/CAP	1 EA
861107	ELECTRICAL CABLE -5 CONDUCTOR (NO.14 AWG)	90 LF
861108	ELECTRICAL CABLE -7 CONDUCTOR (NO.14 AWG)	1150 LF
861116	ELECTRICAL CABLE -2 CONDUCTOR (NO.12 AWG TRAY CABLE)	400 LF
862102	SAWCUT FOR DETECTOR	60 LF
871202	INSTALL CONTROLLER & CABINET. BASE MOUNT	1 EA

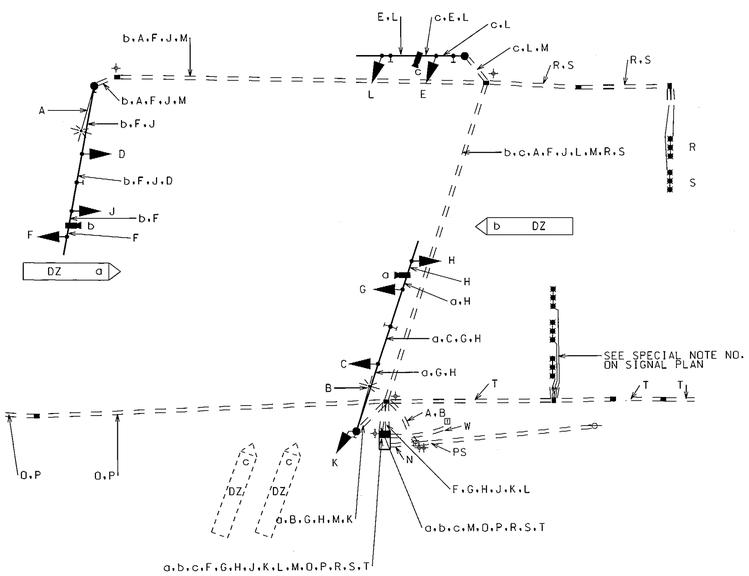
EQUIPMENT LIST 'C'

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR

PHASE CHART



	1	2	3	4	5	6	7	8	9
Phase 1 + 5	R, ◁ G—	R, ◁ G—	R	R, ◁ G—	R, ◁ G—	R	R	R	R
1 & 5 Change	THE CONTROLLER MAY SKIP TO PHASES 1 + 6 OR 2 + 5 OR 2 + 6								
Phase 1 + 6	G, ◁ G—	G, ◁ G—	G	R	R	R	R	R	R
1 + 6 Change	G, ◁ Y—	G, ◁ Y—	G	R	R	R	R	R	R
Phase 2+5	R	R	R	G, ◁ G—	G, ◁ G—	G	R	R	R
2 + 5 Change	R	R	R	G, ◁ Y—	G, ◁ Y—	G	R	R	R
Phase 2 + 6	G	G	G	G	G	G	R	R	R
2 + 6 Change	Y	Y	Y	Y	Y	Y	R	R	R
Phase 4	R	R	R	R	R	G	G	G	G
4 Change	R	R	R	R	R	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R



WIRING KEY

a. b. c.	- VIDEO DETECTION CAMERA LEAD-IN CABLE 3 CONDUCTOR NO.18 AWG
A. B	- 2 CONDUCTOR NO. 12 AWG TRAY CABLE
C. D. E.	- 5 CONDUCTOR NO. 14 AWG ELECTRIC CABLE
F. G. H J. K. L	- 7 CONDUCTOR NO. 14 AWG ELECTRIC CABLE
M	- NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
N	- 1 CONDUCTOR NO. 8 AWG-THHN/THWN ELECTRIC CABLE
O. P.	- NON INVASIVE MICRO-LOOP PROBE LEADS
R. S	- MICRO-LOOP PROBE LEADS
T	- 12 PAIR INTERCONNECT CABLE
U.	- EXISTING OVERHEAD INTERCONNECT CABLE TO BE REMOVED
W	- 6 PAIR COMM. CABLE
PS	- PROPOSED SERVICE FEED
DZ	- DETECTION ZONE
+	- GROUND ROD (3/4"DIA X 10 FT. LENGTH)

WAE Williams Associates-Engineers, P.A.
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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 2 (GOVENOR RITCHIE HWY.) AT DOVER RD.

GENERAL INFORMATION PLAN

SCALE NONE ADVERTISED DATE 2-20-2009 CONTRACT NO. AA 2615168

DESIGNED BY WAE
DRAWN BY WAE
CHECKED BY DAF 2/1/09
F.A.P. NO. 410-729-1004
COUNTY ANNE ARUNDEL
LOGMILE 02000238.12
TIMS NO. J661
TOD NO.

TS NO. 241D-G1 | DRAWING -2 OF 2 | SHEET NO. 11 OF 31

PLOTTED: $DATETIME$
FILE: $FILE$

BY: $USERNAME$

BORDER REV: DATE: Month12720007

DRILL HOLES